



# Gold King Mine Emergency Response Water Quality Data

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY • REGION 8 • AUGUST 2015

## Water Quality Data August 9, 2015

### pH Data (Acidity)

August 8 results indicate that the acidity level at Cement Creek has remained in the range of pH 3.6-4.03 since the release on August 5. At sampling locations in the city of Durango, pH of the river ranges from 6.19-6.67.

### Metals Data

Analytical results for August 7th samples are being processed. Samples collected on August 8th are being prepared for analysis and review. We anticipate a 24-48 hour turnaround on sample analysis. As soon as we receive and evaluate these results they will be provided to the public.

Today EPA released a detailed data table of the sampling in Cement Creek and the upper portions of the Animas River from August 5, the date of the incident, and August 6.

The Gold King Mine blowout occurred late in the morning on August 5<sup>th</sup> 2015. The contaminant plume moved downstream at approximately four miles per hour. At Cement Creek, which is downstream of the blowout, concentrations of metals throughout the first day following the blowout spiked above historical averages for copper, zinc and manganese. Twenty four hours after the blowout the data indicate a decrease in those concentrations.

Data from the Animas River just below the town of Silverton showed an initial increase in metals concentrations with levels trending towards historical averages by the morning of August 6<sup>th</sup>, 2015.

Data from Bakers Bridge on the Animas River just above Durango showed an increase above historical averages as August 6<sup>th</sup> as expected with the arrival of the leading

edge of the contaminant plume.

It is believed that subsequent data collection throughout the region will demonstrate a decrease in contaminant levels in the river as the contaminant plume moves downstream.

### Comparison of Surface Water Quality Data to Human Health and Agricultural Screening Levels

EPA has compared the surface water quality data collected on August 5<sup>th</sup> and 6<sup>th</sup> to screening levels for human health developed by EPA. The screening levels for human incidental ingestion during recreation are based on an exposure duration totaling 60 days, 8 hours/day. The State of Colorado has developed screening levels for agricultural exposure. The screening levels for agricultural exposure are based on an exposure duration totaling 30 days.

Based on the data we have seen so far, EPA and ATSDR do not anticipate adverse health effects from exposure to the metals detected in the river water samples from skin contact or incidental (unintentional) ingestion. Similarly, the risk of adverse effects to livestock that may have been exposed to metals detected in river water samples from ingestion or skin contact is low. It is advisable to avoid areas with orange discoloration in the river water.

Although the pH levels between Cement Creek and Durango have returned to baseline levels washing with soap and water after contact with the river water is a sound public health practice to minimize exposure to the metals and bacteria that may be present in any untreated river water.

A Public Call Center has been set up at La Plata County's Emergency Operations Center. Please call 970-385-8700 to get answers and request assistance with well sampling.